



Ontario Energy Board Commission de l'énergie de l'Ontario

DECISION

EB-2016-0322

UNION GAS LIMITED

2017 Storage Enhancement Project

**BEFORE: Cathy Spoel
Presiding Member**

**Paul Pastirik
Member**

April 13, 2017

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1. INTRODUCTION

Union Gas Limited (Union) applied to the Ontario Energy Board (OEB) for approvals under sections 38(1), 40 (1), and 90(1) of the *Ontario Energy Board Act, 1998* (OEB Act). Collectively, these approvals would allow Union to increase capacity and deliverability of the Dawn 156 and Bentpath natural gas designated storage areas located in the Township of Dawn-Euphemia in Lambton County (2017 Storage Enhancement Project or the 2017 Project). The general location of the 2017 Project is represented in maps attached as Appendix A to this Decision.

With the completion of the 2017 Project, Union's storage capacity will increase by 49,000 103m³ (1.7 Bcf), and the deliverability will be increased by 70,000 GJ/day. Union will sell the incremental storage capacity and deliverability at market prices as part of its non-regulated storage business. The planned in-service date of the 2017 Project is September 2017.

Union applied for the following:

- An order to allow Union to increase the operating pressure in its Dawn 156 pool above the current operating pressure approved by the OEB in the EB-2007-0633 proceeding. The increased operating pressure will add storage capacity to the Dawn 156 pool.
- A favourable report to the Ministry of Natural Resources and Forestry (MNRF) pursuant to section 40(1) of the OEB Act for licences to drill three injection/withdrawal (I/W) wells in the Dawn 156 pool and one I/W well in the Bentpath pool; to deepen and convert an observation well to an I/W well, and to deepen three I/W wells in the Bentpath pool (the Proposed Wells). Drilling and operation of the Proposed Wells will add deliverability to the Dawn 156 and the Bentpath pools.
- An order for leave to construct a 600 metre, 12 inch nominal diameter pipelines within the Dawn 156 and the Bentpath pools, pursuant to section 90 of the OEB Act (Proposed Pipelines). The Proposed Pipelines will connect the Proposed Wells to Union's integrated storage and transportation system.

The OEB approves Union's applications subject to certain conditions for the well licences and for the leave to construct the Proposed Pipelines.

2. PROCESS

The OEB issued a Notice of Application on December 15, 2016. Union served and published the Notice of Application as the OEB directed.

Enbridge Gas Distribution Inc., the MNRF, and Hydro One Networks Inc. are registered intervenors in the proceeding. The OEB proceeded by way of a written hearing. In accordance with Procedural Order No. 1, the interrogatory phase was completed on February 7, 2017. The MNRF and OEB staff filed written submissions on February 21, 2017. The evidentiary record was completed on February 28, 2017 with Union's written reply submission.

3. STRUCTURE OF THE DECISION

The Decision will first address the issues common to all components of the 2017 Storage Enhancement Project:

- Need for the storage enhancement
- Costs and potential impact on Union's rate-payers
- Land related matters
- Environmental matters
- Indigenous consultation

The Decision will then address the application to increase the operating pressure of the Dawn 156 pool in terms of the geological, engineering, operational, technical and safety aspects.

Union's applications to drill and enhance the Proposed Wells in both the Dawn 156 and Bentpath pools are presented in a separate section.¹

Matters of pipeline design specifications will be covered in a section on leave to construct the pipeline.

In the attachments to this Decision, the OEB is issuing the following:

- An Order permitting an increase in the operating pressure of the Dawn 156 natural gas storage pool EB-2016-0322 (Schedule 1)
- The OEB Report to the Minister of Natural Resources and Forestry recommending that the Minister grant Union licences to drill and deepen the requested wells in the Bentpath and Dawn 156 storage pools, with recommended licence conditions EB-2016-0322 (Schedule 2)
- An Order granting Leave to Construct the Proposed Pipelines with conditions, EB-2016-0322 (Schedule 3)

¹ Geological, engineering, operational, technical and safety aspects of underground storage operations (including maximum operating pressure and drilling and operation of storage wells) are within the authority of the MNRF in accordance with requirements of CSA Z341.1-14 "Storage of Hydrocarbons in Underground Formations" (CSA Z341) and the *Gas and Salt Resources of Ontario, Provincial Operating Standards* (the Provincial Standards).

4. NEED

Union described the need for the 2017 Project as a growing market demand for storage capacity and deliverability in Ontario.

Union will sell the incremental capacity at market-based prices at Dawn to its existing non-utility customers (storage and transportation) and new non-utility storage customers (marketers or local distribution companies).

All of the incremental deliverability has been contracted on a long-term basis by a 980 megawatt merchant natural gas-fired electricity generating plant - TCE Napanee, located between the cities of Kingston and Napanee. The TCE Napanee generating station is currently under construction. It is expected to commence commercial operation in 2018. The 2017 Project is the first phase of a two-phase storage deliverability enhancement. Not all of the deliverability requested by TCE Napanee will be met by the 2017 Project. Union plans to file, in 2017, as a phase two, another storage enhancement application involving its Bickford pool to meet the remaining deliverability requested by TCE Napanee. Union plans to complete the phase two storage enhancement in November 2018, shortly after the start of the TCE Napanee commissioning and testing. Union stated in written reply submission that there are limited construction efficiencies because the two deliverability phases are being constructed in different storage pools. In response to OEB Staff interrogatory 2 c) Union stated that according to its contract terms with TCE Napanee, Union is responsible for bridging the partial gap between contract start and a phase two storage enhancement completion, if required.

FINDINGS

The OEB finds that Union has established the need for the 2017 Storage Enhancement Project.

5. COST AND POTENTIAL IMPACT ON UNION'S RATE-PAYERS

Union stated that the incremental capacity and deliverability services resulting from the 2017 Project will be sold at market-based prices and therefore the 2017 Project costs will not be recovered from Union's rate-payers.

OEB staff noted that since the Natural Gas Electricity Interface Review (NGEIR) EB-2005-0551 Decision, Union has not been required to file cost or economic information for unregulated storage projects such as the 2017 Storage Enhancement Project.

OEB staff submitted that they have no concerns with the impact of the 2017 Project on Union's rate-payers.

FINDINGS

The OEB finds that the costs of the 2017 Project will have no impact on Union's rate-payers as the increased storage capacity and deliverability will serve Union's unregulated storage business at market-based prices and the 2017 Project costs will be borne by Union's shareholders.

6. LAND MATTERS

Drilling and enhancement of all the Proposed Wells, construction of pipelines and roadways will be in accordance with the existing Storage Lease Agreements within the Dawn 156 and the Bentpath pools.

In addition to the existing Storage Lease Agreements, Union obtained from all of the six directly affected landowners signed Letters of Acknowledgement, in which they agree to the location of all of the 2017 Project facilities and state they have no objection to commencement of drilling the Proposed Wells, construction of the pipelines, and construction of the permanent all-weather access roadways.

With regard to the pipelines, Union stated that although the existing Storage Lease Agreements allow Union to construct gathering pipelines, it will offer directly affected landowners a new Form of Pipeline Easement Agreement. Union filed the Form of Pipeline Easement Agreement and noted that this form was previously approved by the OEB in the EB-2014-0261 proceeding and was amended to include new requirements under CSA Z662-15 “Oil and Gas Pipelines Systems” (CSA Z662-15) with respect to the prohibition of storage of a flammable material, solid or liquid spoil, refuse waste or effluent on the easement.

FINDINGS

The OEB is satisfied that Union has the agreements required for construction and siting of the 2017 Project, and that there are no outstanding land-related concerns arising from the 2017 Project.

Section 97 of the OEB Act stipulates that an approval under section 90 cannot be granted until the OEB is satisfied that an applicant has offered or will offer to each owner of land affected by the approved pipeline route an agreement in a form approved by the OEB. The OEB approves the Form of Agreement as it is consistent with the form of agreement previously approved by the OEB and includes the current requirements of CSA Z662-15 for storing flammable materials and solid and effluent waste in the easement.

7. ENVIRONMENTAL MATTERS

In accordance with the requirements of the OEB's "*Environmental Guidelines for the Location, Construction and Operation of Hydrocarbon Pipelines in Ontario*" (2016) (OEB Environmental Guidelines), Union completed the Environmental Protection Plan (EPP) for all of the facilities in the 2017 Project.

The Ontario Pipeline Coordinating Committee (OPCC) reviewed the EPP and raised no concerns with the environmental assessment and mitigation of the potential construction-related impacts.

Union has committed to conducting an environmental inspection program to ensure the implementation of all the recommendations in the EPP and any commitments made during the regulatory proceeding. Union accepted conditions of approval for both the well drilling and pipeline construction.

In a letter of comment to the OEB, Jake and Mary Smit, landowners in the Dawn 156 pool (landowners) voiced concerns about the gas content, water quality and testing, and monitoring of water quality of a water well on their property; noise levels resulting from operation of the "156 station"; fire and safety hazards related to operation of the station; and communication with Union. In January 2017, Union and Union's environmental consultant, Stantec Consulting Ltd. (Stantec), met with the Smits to discuss their concerns and to take a water sample for quality testing. The sampling was completed to test the general water quality, dissolved gas concentration, and to attempt to evaluate the potential source of gas. Stantec advised the Smits that the results of water testing would be made available and that based on the results Stantec might recommend measures to protect and maintain water quality. Stantec also provided contact information for Union's Land Agent for any further enquiries by the landowners. In written reply submissions dated February 28, 2017 Union stated that it would also provide to the OEB the results of water tests including any recommendations by Stantec.

FINDINGS

The OEB finds that Union followed the requirements of the OEB Environmental Guidelines. Union shall comply with the conditions of its licences to drill and operate the Proposed Wells and the conditions of approval of leave to construct the Proposed Pipelines. Union shall ensure that impacts of well drilling and pipeline construction are mitigated and monitored.

The OEB finds that Union has appropriately responded to the concerns raised by the Jake and Mary Smit.

8. INDIGENOUS CONSULTATION

The following First Nations and Métis were consulted about the 2017 Storage Enhancement Project: Chippewa of the Thames First Nation, Caldwell First Nation, Aamjiwnaang First Nation, Walpole Island First Nation, Kettle and Stoney Point First Nation.

Union's first notification about the 2017 Project was by e-mail on May 9, 2016. Union conducted the consultation by in-person meetings, as well as phone and email communication between May 2016 and February 2017.

On December 21, 2016, Union filed with the OEB an affidavit of service confirming that the Notice of Application had been served on all Aboriginal communities with lands or interest in the lands directly affected by the proposed 2017 Storage Enhancement Project and to the Métis Nations of Ontario, Lands, Resources and Consultation Office in Toronto.

Union informed the consulted First Nations and Métis that it will have inspectors available as a primary contact for First Nations and Métis communities to discuss and review any issues that may arise during construction. Also, upon completion of archaeological assessments, Union will provide the results of the surveys to any First Nations or Métis upon their request.

To date, no issues have been brought forward regarding the 2017 Project. Due to the location and specifics of the 2017 Project, Union has stated that they do not expect any issues to be raised in the future by the First Nations or Métis.

FINDINGS

The OEB finds that Union has adhered to the intent of the OEB Environmental Guidelines regarding Indigenous consultation. It appears that, as of the date of this Decision, Union has adequately addressed the requirement for consultation with Indigenous communities.

9. INCREASING OPERATING PRESSURE - DAWN 156 POOL

Union filed an application with the OEB requesting permission to increase the current maximum operating pressure of the Dawn 156 pool for the purpose of increasing storage capacity. In accordance with requirements of CSA Z341.1-14 “Storage of Hydrocarbons in Underground Formations” (CSA Z341) and the *Gas and Salt Resources of Ontario, Provincial Operating Standards* (the Provincial Standards), the MNRF is the provincial authority that oversees geological, engineering, operational, technical and safety aspects related to the operating pressure of underground storage.

Union proposed that the following condition be placed upon operation of the Dawn 156 pool:

Union Gas Limited shall not operate the Dawn 156 storage pool above a pressure representing a pressure gradient of 17.2 kPa/m (0.76 psi/f) of depth without leave of the Board. Union Gas Limited shall provide summaries of an engineering study and geological study in support of any leave application and a formal confirmation from the Ministry of Natural Resources and Forestry that operating the pool at the increased operating pressure complies with the requirements of the CSA Z341 standard.

In accordance with the requirements of the CSA Z341.1-14, Union provided the MNRF with the following reports on the Dawn 156 pool for their review: (i) “What If” Analysis and Operability Issues report (ii) Assessment of Neighboring Activities (iii) Engineering Assessment (together the Dawn 156 Pool Reports). The MNRF advised the OEB that it is satisfied that the Dawn 156 Pool Reports are complete and it has no objection to approval of the application as proposed.

FINDINGS

The OEB approves Union’s request to increase the operating pressure of the Dawn 156 pool to the pressure corresponding to a pressure gradient of 17.2 kPa/m (0.76 psi/ft). The approval is granted by a way of the Order attached as Schedule 1 to this Decision. The OEB accepts the wording of the condition proposed by Union.

The OEB notes that the MNRF confirmed that it has reviewed and is satisfied with Union’s compliance with the requirements of CSA Z341.1-14 and the Dawn 156 Pool Reports. The OEB expects that Union will comply with applicable requirements of the *Oil, Gas and Salt Resources Act*, O.Reg. 245/97, the Provincial Standards, and CSA Z341.-14 to the operation of Dawn 156 to the satisfaction of the MNRF.

10. WELL LICENCES APPLICATIONS

Union applied for licences to drill three new I/W wells (UD.286, UD.288, UD.287) in the Dawn 156 pool. In the Bentpath pool, Union applied for licences to deepen four wells (UB.12, UB.13, UB.1, and UB.8) and to drill one new well (UB.14).

FINDINGS

The OEB finds that the applications should be approved and the licences granted. The OEB will issue a Report to the Minister of Natural Resources and Forestry (Report) recommending that the application for licences for the Proposed Wells be approved. The Report is attached as Schedule 2 to this Decision. The OEB has attached proposed licence conditions to the Report. Union has agreed with the conditions and the MNRF had no comments.

This recommendation will expire twelve months after the date of the Report to the MNRF.

11. LEAVE TO CONSTRUCT

The Proposed Pipelines will connect the new storage wells to Union's integrated storage and transportation system. The construction is planned to be completed during the spring and summer of 2017.

Union's evidence is that design and pipe specifications are in accordance with Ontario Regulation 210/01 for Oil and Gas Pipeline Systems. Union proposes to design all pipelines to a class 2 location in anticipation of future growth, and to keep the class location consistent throughout the pools.

Union will abandon two wells as part of this 2017 Project. Approximately 50 metres of 6 inch diameter pipeline and 150 metres of 8 inch diameter pipelines to these wells will be abandoned in place. Union stated that these pipelines will be abandoned in accordance with the Technical Standards and Safety Authority Abandonment Guidelines which are filed on the record.

FINDINGS

Subsection 96(1) of the OEB Act states that:

If, after considering an application under section 90, 91, or 92 the Board is of the opinion that the construction, expansion or reinforcement of the proposed work is in the public interest, it shall make an order granting leave to carry out the work.

Having considered the need for the storage enhancement; costs and potential impact on Union's rate-payers; land related matters; environmental matters; pipeline design specifications; and Indigenous consultation, the OEB finds that the construction of the Proposed Pipelines is in the public interest. The OEB approves Union's application for leave to construct the Proposed Pipelines to connect the wells to Union's system. The OEB's Leave to Construct Order is attached to this decision as Schedule 3. The OEB's approval is subject to the conditions of approval attached as Appendix A to the Leave to Construct Order.

12. OEB'S COSTS OF THIS PROCEEDING

Union shall pay the OEB's costs incidental to this proceeding upon receipt of the OEB's invoice.

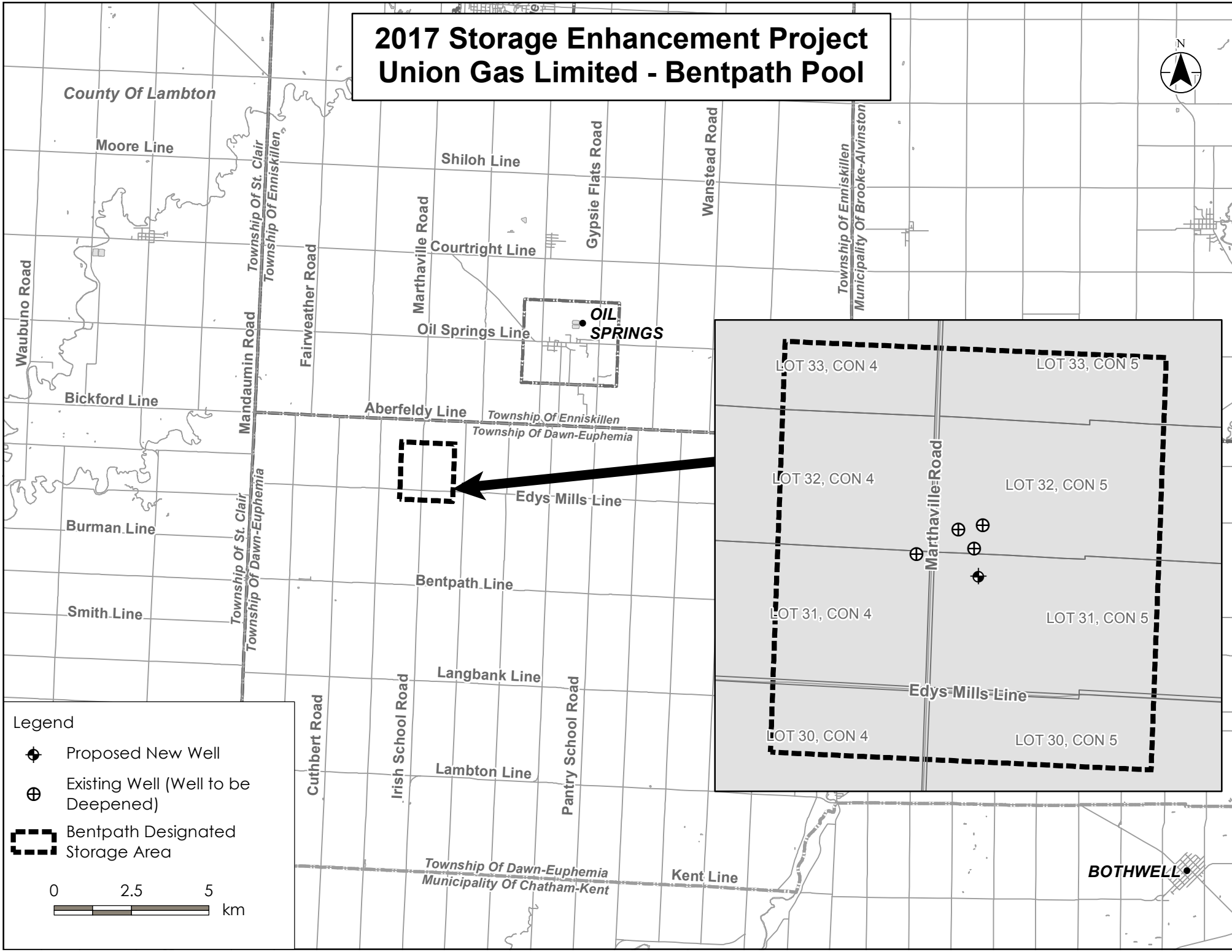
APPENDIX A




EB-2016-0322

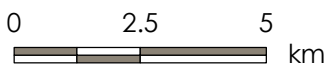
MAPS OF THE 2017 STORAGE ENHANCEMENT PROJECT

APRIL 13, 2017

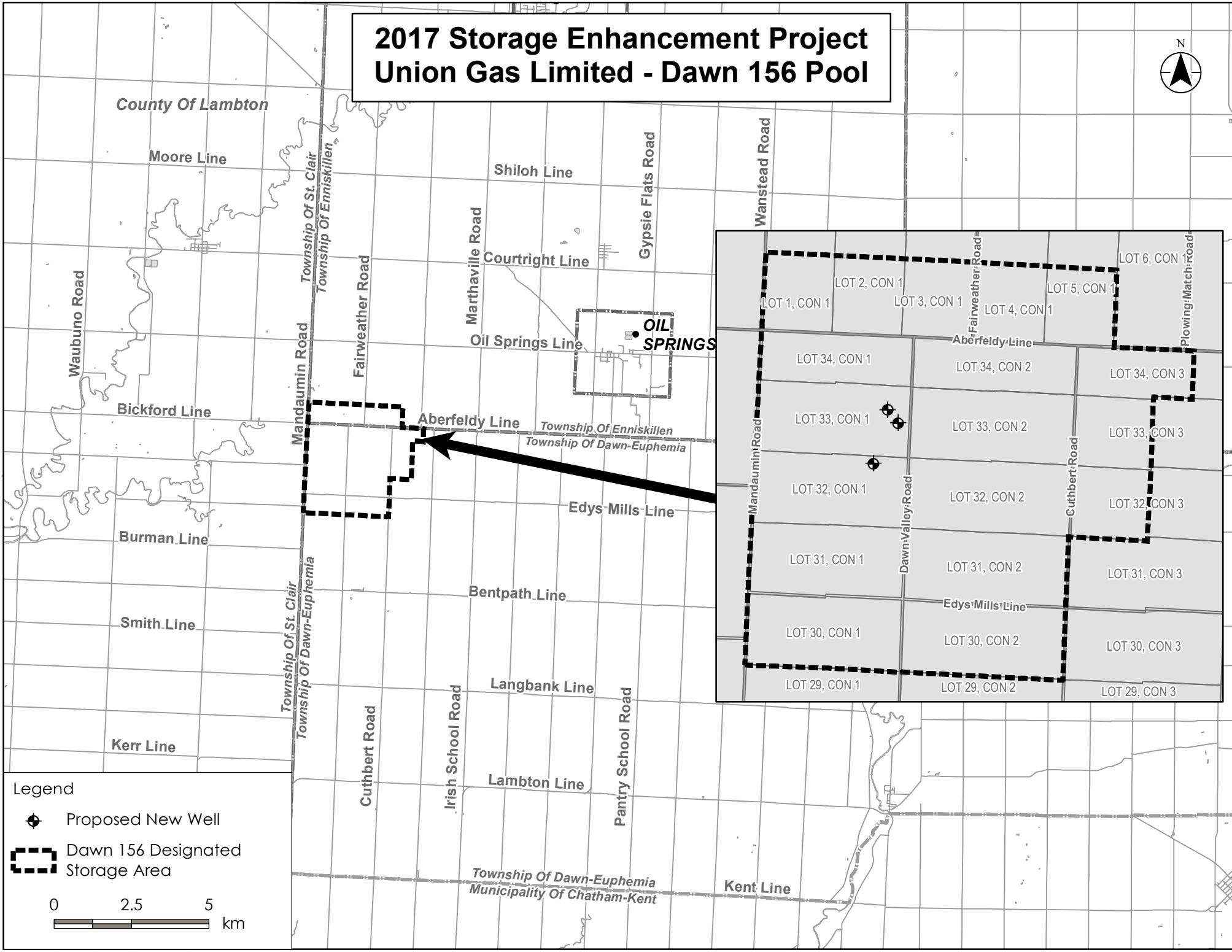
2017 Storage Enhancement Project Union Gas Limited - Bentpath Pool





- Legend**
-  Proposed New Well
 -  Existing Well (Well to be Deepened)
 -  Bentpath Designated Storage Area




2017 Storage Enhancement Project Union Gas Limited - Dawn 156 Pool



Legend

-  Proposed New Well
-  Dawn 156 Designated Storage Area

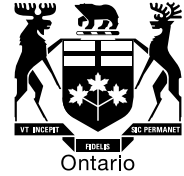
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SCHEDULE 1

EB-2016-0322

ORDER TO INCREASE OPERATING PRESSURE IN DAWN 156 POOL

APRIL 13, 2017



EB-2016-0322

IN THE MATTER OF the Ontario Energy Board Act, 1998, S.O. 1998, c.15, Schedule B;

AND IN THE MATTER OF an application by Union Gas Limited for an order permitting an increase in the operating pressure of its Dawn 156 natural gas storage pool in the Township of Dawn-Euphemia in the County of Lambton.

BEFORE: Cathy Spoel
Presiding Member

Paul Pastirik
Member

ORDER

April 13, 2017

Union Gas Limited (Union) applied under section 38(1) of the *Ontario Energy Board Act, 1998*, S.O. 1998, c.15, Schedule B (the OEB Act) for leave to operate the Dawn 156 natural gas storage pool at a maximum pressure gradient of 17.2 kPa/m (0.76 psi per foot) as permitted under the CSA Standard Z341.1-14 "*Storage of hydrocarbons in underground formations*" (CSA Z341) (Increase in Operating Pressure).

In its application, Union requests that the OEB allow Union to increase the operating pressure in the Dawn 156 pool above a pressure gradient of 16.5 kPa/m (0.73 psi/ft) that the OEB allowed in the EB-2007-0633 proceeding.

Union requested that the following condition be placed on the operation of the Dawn 156 pool:

Union Gas Limited shall not operate the Dawn 156 storage pool above a pressure representing a pressure gradient of 17.2 kPa/m (0.76 psi/f) of depth without leave of the Board. Union Gas Limited shall provide summaries of an engineering study and geological study in support of any leave application and a formal confirmation from the Ministry of Natural Resources and Forestry that operating the pool at the increased operating pressure complies with the requirements of the CSA Z341 standard.

In addition to the application to increase the operating pressure, Union applied for licences to drill wells in the Dawn 156 and the Bentpath pools and for leave to construct pipelines to connect new wells to Union's integrated storage and transportation system.

All these approvals collectively enable Union to increase storage deliverability and capacity (2017 Storage Enhancement Project) of Union's storage system.

The OEB issued a Notice of Application for the 2017 Storage Enhancement Project on December 15, 2016. Union served and published the notice as directed by the OEB. The OEB proceeded by way of a written hearing. In accordance with Procedural Order No. 1 issued on January 10, 2017, the interrogatory phase was completed on February 7, 2017. The MNRF and OEB staff filed written submissions on February 21, 2017. The record for the proceeding was closed on February 28, 2017 with Union's written reply submission.

On April 13, 2017 the OEB issued a Decision approving all the applications sought under OEB File No. EB-2016-0322.

This Order is issued in accordance with the OEB's Decision in EB-2016-0322. In the EB-2016-0322 Decision the OEB found that the evidence on the record demonstrated that the increase in the maximum operating pressure gradient of the Dawn 156 pool is in accordance with the requirements of the CSA Z341 standard.

IT IS ORDERED THAT:

1. Union Gas Limited may increase the operating pressure of the Dawn 156 storage pool to a pressure representing a pressure gradient of 17.2 kPa/m (0.76 psi/f) of depth.
2. Union Gas Limited shall not operate the Dawn 156 storage pool above a pressure representing a pressure gradient of 17.2 kPa/m (0.76 psi/f) of depth without leave of the OEB. Union Gas Limited shall provide summaries of an engineering study and geological study in support of any leave application and a formal confirmation from the Ministry of Natural Resources and Forestry that operating the pool at the increased operating pressure complies with the requirements of the CSA Z341 standard.

ISSUED at Toronto, April 13, 2017

ONTARIO ENERGY BOARD

Original Signed By

Kirsten Walli
Board Secretary

SCHEDULE 2

EB-2016-0322

**REPORT OF THE ONTARIO ENERGY BOARD
TO THE MINISTER OF NATURAL RESOURCES AND FORESTRY
APPLICATION BY UNION GAS LIMITED TO DRILL WELLS
IN THE DAWN 156 AND BENTPATH DESIGNATED STORAGE AREAS**

APRIL 13, 2017

**Ontario Energy
Board**

**Commission de l'énergie
de l'Ontario**



EB-2016-0322

**REPORT OF THE ONTARIO ENERGY BOARD
TO THE MINISTER OF NATURAL RESOURCES AND FORESTRY
APPLICATION BY UNION GAS LIMITED TO DRILL WELLS
IN THE DAWN 156 AND BENTPATH DESIGNATED STORAGE AREAS**

**Before: Cathy Spoel, Presiding Member
Paul Pastirik, Member**

Date: April 13, 2017

1. INTRODUCTION AND SUMMARY

Pursuant to section 40(1) of the *Ontario Energy Board Act 1998 (Act)*, the OEB issues this Report recommending that the Minister of Natural Resources and Forestry (MNRF) grant to Union Gas Limited (Union) licences to drill and deepen the following wells: In the Dawn 156 pool:

- UD.286 (new Injection/Withdrawal well)
- UD.288 (new Injection/Withdrawal well)
- UD.287 (new Injection/Withdrawal well)

In the Bentpath pool:

- UB.12 (deepen an existing well)
- UB.13 (deepen an existing well)
- UB.1 (deepen an existing well)
- UB.8 (deepen an existing well)
- UB.14 (new Injection/Withdrawal well)

In Ontario, geological, engineering, operational, technical and safety aspects of underground storage operations of drilling, operation and modification works of storage wells are within the authority of the MNRF in accordance with requirements of CSA Z341.1-14 “*Storage of Hydrocarbons in Underground Formations*” (CSA Z341) and the *Gas and Salt Resources of Ontario, Provincial Operating Standards* (the Provincial Standards).

The OEB’s recommendation includes conditions attached as Appendix A to this Report. The conditions relate to the authority to issue the licence, certain construction requirements, monitoring and reporting of any mitigation for construction impacts, and a requirement that Union should conform to the CSA Z341 standards to the satisfaction of the MNRF.

2. PROCESS

Union applied to the MNRF under the *Oil, Gas, and Salt Resources Act (OGSRA)* for licences to drill three injection/withdrawal (I/W) wells in the Dawn 156 pool and one I/W well in the Bentpath pool; to deepen and convert an observation well to an I/W well; and to deepen three I/W wells in the Bentpath pool (Proposed Wells). On December 1, 2016 the MNRF referred the applications to the OEB pursuant to section 40 (1) of the Act. The Proposed Wells are part of Union’s 2017 Storage Enhancement Project which also includes increasing operating pressure in the Dawn 156 pool and construction of pipelines from the new wells to connect to Union’s pipeline system. The OEB issued a Notice of Application on December 15, 2016. Union served and published the Notice of Application as the OEB directed.

Enbridge Gas Distribution Inc., the MNRF and Hydro One Networks Inc. were registered intervenors in the proceeding. The OEB proceeded by way of a written hearing. In accordance with Procedural Order No. 1 the interrogatory phase was completed on February 7, 2017. The MNRF and OEB staff filed written submissions on February 21, 2017. The record for the proceeding was closed on February 28, 2017 with Union's reply written submission.

3. FACTORS TO CONSIDER

When reviewing and reporting to the MNRF on natural gas storage well drilling licence applications, the OEB considers the following:

- the need for the wells;
- costs of drilling and construction and impact on rate-payers;
- the legal and regulatory requirements applicable to the wells;
- the environmental impacts of the proposal;
- landowner matters;
- Indigenous consultation; and
- conditions of approval.

The evidence and the OEB's findings related to each of these factors are described below.

3.1 NEED

Drilling and operation of Proposed Wells will increase deliverability by 70,000 GJ/day. Union based the need for incremental deliverability on a market demand for storage deliverability. Union stated that all of the incremental deliverability has been contracted on a long term basis by a 980 megawatt merchant natural gas-fired electricity generating plant - TCE Napanee. The TCE Napanee plant is under construction and is planned to start commercial operation in 2018.

OEB staff submitted that Union adequately addressed the issue of need. The MNRF's submission did not question the need for the Proposed Wells.

The OEB finds that the Proposed Wells are needed.

3.2 COSTS

Union stated that the incremental capacity and deliverability services resulting from the 2017 Project will be sold at market-based prices and therefore the 2017 Project costs will not be recovered from Union's rate-payers.

OEB staff noted that since the Natural Gas Electricity Interface Review (NGEIR) EB-2005-0551 Decision, Union has not been required to file cost or economic information for unregulated storage projects such as the 2017 Storage Enhancement Project. OEB staff submitted that they have no concerns with the impact of the 2017 Project on Union's rate-payers.

The OEB finds that the costs of the 2017 Project will have no impact on Union's rate-payers as the increased storage capacity and deliverability will serve Union's

unregulated storage business at market-based prices and the 2017 Project costs will be borne by Union's shareholders.

3.3 LEGAL AND REGULATORY REQUIREMENTS

The MNRF is the provincial authority that oversees the implementation of CSA Z341. The MNRF was an active participant in the proceeding. Union confirmed that it will conduct the drilling to meet the requirements of CSA Z341 to the satisfaction of the MNRF. The MNRF has no concerns with the details of the drilling programs filed with the application.

Union states that the Proposed Wells will be designed, constructed, operated, maintained and abandoned in accordance with the *Occupational Health and Safety Act* and the OGSRA and their respective Regulations.

Union's evidence states that it met with the MNRF on August 10, 2016 to discuss the 2017 Project and provide copies of the reports which were prepared for the 2017 Project. An updated presentation was provided to the MNRF in October 2016.

The reports completed and filed with the MNRF for the Dawn 156 pool are:

- A "What If" Analysis of Hazards and Operability Issues Report (HAZOP);
- An Assessment of Neighboring Activities; and
- An Engineering Assessment for the Dawn 156 Pool

The reports completed and filed with the MNRF for the Bentpath pool are²:

- A "What if" Analysis of Hazards and Operability Issues Report (HAZOP); and
- An Assessment of Neighboring Activities

These reports support the well drilling applications and enhancement of the deliverability at the Dawn 156 and Bentpath pools. The MNRF submitted on the record that it has reviewed the reports and that it has no objections to approval of the applications as proposed by Union.

The OEB notes that Union is an experienced storage developer and operator, technically competent to undertake the planned drilling program and the wells completion activities. The OEB finds that Union has the requisite expertise to safely drill the wells and maintain the geological integrity of the Dawn 156 and Bentpath pools. Union confirmed that it will comply with the OGSRA O.Reg. 245/97, the Provincial Standards and CSA Z341.

The OEB recommends, under subsection 40(1) of the Act, that the licences be granted to Union to drill the Proposed Wells in the Dawn 156 and Bentpath pools, subject to the

² Union submitted that an Engineering Assessment is not required for the proposed well drilling in the Bentpath pool since the pressure in the pool is not changing. An Engineering Assessment for the Bentpath pool was, however, completed by Geofirma and provided to the MNRF as part of the EB-2012-0391 proceeding.

conditions attached as Appendix A to the Report. Regarding Union's compliance with CSA Z341, condition # 7 stipulates that compliance shall be determined to the satisfaction of the MNRF.

3.4 ENVIRONMENTAL IMPACTS

In accordance with the requirements of the OEB's "*Environmental Guidelines for the Location, Construction and Operation of Hydrocarbon Pipelines in Ontario*" (2016) (OEB Environmental Guidelines) Union completed the Environmental Protection Plan (EPP) for all the facilities in the 2017 Project including the Proposed Wells.

Union has committed to conducting an environmental inspection program to ensure the implementation of all the recommendations in the EPP, any commitments made during the regulatory proceeding, and conditions of approval for the well drilling.

The OEB finds that Union followed the requirements of the OEB Environmental Guidelines. Union shall comply with the conditions of its licences to drill and operate the Proposed Wells and the conditions of approval of leave to construct the Proposed Pipelines. Union shall ensure that impacts of well drilling and pipeline construction are mitigated and monitored.

3.5 LANDOWNER MATTERS

Union noted that the drilling of all the Proposed Wells will be in accordance with the existing Storage Lease Agreements within the Dawn 156 and the Bentpath storage pools.

In addition to the existing Storage Lease Agreements, Union obtained a signed a Letter of Acknowledgement from each of six directly affected landowners, in which they agree with the location of the Proposed Wells and state they have no objection to commencement of drilling the Proposed Wells.

The OEB is satisfied that Union has acquired agreements with the landowners related to drilling of the Proposed Wells.

3.6 Indigenous Consultation

The following First Nations and Métis were consulted about the 2017 Storage Enhancement Project: Chippewa of the Thames First Nation, Caldwell First Nation, Aamjiwnaang First Nation, Walpole Island First Nation, Kettle and Stoney Point First Nation.

Union's first notification about the 2017 Project was by e-mail on May 9, 2016. Union conducted the consultation by meetings and phone and email communication between May 2016 and February 2017.

On December 21, 2016, Union filed with the OEB an affidavit of service confirming that the Notice of Application had been served on all Aboriginal communities with

lands or interest in the lands directly affected by the proposed 2017 Storage Enhancement Project and to the Métis Nations of Ontario, Lands, Resources and Consultation Office in Toronto.

Union informed the consulted First Nations and Métis that it will have inspectors available as a primary contact for First Nations and Métis communities to discuss and review any issues that may arise during construction. Also, upon completion of archaeological assessments, Union will provide the results of the surveys to any First Nations or Métis upon their request.

To date, no issues have been brought forward regarding the 2017 Project. Due to the location and specifics of the 2017 Project, Union does not expect any issues to be raised in the future by the First Nations or Métis.

The OEB finds that Union has adhered to the intent of the OEB Environmental Guidelines regarding Indigenous consultation. It appears that, as of the date of this Decision, Union has adequately addressed the requirement for consultation with Indigenous communities.

4. RECOMMENDATIONS

The OEB recommends approval of the application for the well drilling licences as follows:

In the Dawn 156 Designated Storage Area:

- UD.286 (new Injection/Withdrawal well)
- UD.288 (new Injection/Withdrawal well)
- UD.287 (new Injection/Withdrawal well)

In the Bentpath Designated Storage Area:

- UB.12 (deepen an existing well)
- UB.13 (deepen an existing well)
- UB.1 (deepen an existing well)
- UB.8 (deepen an existing well)
- UB.14 (new Injection/Withdrawal well)

The proposed licence conditions in Appendix A relate to the certain construction requirements, monitoring and reporting of any mitigation of construction impacts, and the requirement that Union conform to the CSA Z341 standards to the satisfaction of the MNRF.

These recommendations shall expire twelve months from the date of this Report.

DATED at Toronto, April 13, 2017

ONTARIO ENERGY BOARD

Original Signed By

Kirsten Walli
Board Secretary

Appendix A

TO THE

EB-2016-0322

**REPORT OF THE ONTARIO ENERGY BOARD
TO THE MINISTER OF NATURAL RESOURCES AND FORESTRY
APPLICATION BY UNION GAS LIMITED TO DRILL WELLS
IN THE DAWN 156 AND BENTPATH DESIGNATED STORAGE AREAS**

**CONDITIONS OF LICENCE
WELL DRILLING AND OPERATION**

APRIL 13, 2017

Union Gas Limited
EB-2016-0322
Conditions of Licence - Well Drilling and
Operation

1. Union Gas Limited (Union) shall rely on the evidence filed with the OEB in EB-2016-0322 proceeding and comply with applicable laws, regulations and codes pertaining to the construction of the proposed wells.
2. The authority granted under this licence to Union is not transferable to another party without leave of the OEB. For the purpose of this condition another party is any party except Union Gas Limited.
3. Union shall construct the facilities and restore the land in accordance with its Application and evidence given to the OEB, except as modified by this licence and these Conditions.
4. Union shall ensure that the movement of equipment is carried out in compliance with all procedures filed with the OEB, and as follows:
 - i) Union shall make reasonable efforts to keep the affected landowner as well as adjacent landowners and their respective tenant farmers, or their designated representatives, informed of its plans and construction activities; and
 - ii) the installation of facilities and construction shall be coordinated so as to minimize disruption of agricultural land and agricultural activities.
5. Union shall, subject to the recommendation by an independent tile contractor and subject to the landowners approval, construct upstream and downstream drainage headers adjacent to the drilling area and access roads that cross existing systematic drainage tiles, prior to the delivery of heavy equipment, so that continual drainage will be maintained.
6. Both during and after construction, Union shall monitor the impacts of construction, and shall file with the OEB one paper copy and one electronic (searchable PDF) version of each of the following reports:
 - a) a post construction report, within three months of the in-service date, which shall:

-
- i. provide a certification, by a senior executive of the company, of Union's adherence to Condition 1;
 - ii. describe any impacts and outstanding concerns identified during construction;
 - iii. describe the actions taken or planned to be taken to prevent or mitigate any identified impacts of construction;
 - iv. include a log of all complaints received by Union, including the date/time the complaint was received, a description of the complaint, any actions taken to address the complaint, the rationale for taking such actions; and
 - v. provide a certification, by a senior executive of the company, that the company has obtained all other approvals, permits, licences, and certificates required to construct, operate and maintain the proposed project.
- b) a final monitoring report, no later than fifteen months after the in-service date, or, where the deadline falls between December 1 and May 31, the following June 1, which shall:
- i. provide a certification, by a senior executive of the company, of Union's adherence to Condition 1;
 - ii. describe the condition of any rehabilitated land;
 - iii. describe the effectiveness of any actions taken to prevent or mitigate any identified impacts construction;
 - iv. include the results of analyses and monitoring programs and any recommendations arising therefrom; and
 - v. include a log of all complaints received by Union, including the date/time the complaint was received, a description of the complaint, any actions taken to

address the complaint, the rationale for taking such actions.

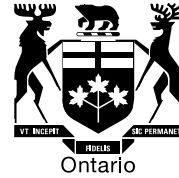
7. For the purposes of these conditions, conformity of Union with CSA Z341 shall be to the satisfaction of the Ministry of Natural Resources and Forestry.

SCHEDULE 3

EB-2016-0322

**ORDER
LEAVE TO CONSTRUCT PIPELINES**

APRIL 13, 2017



EB-2016-0322

IN THE MATTER OF the *Ontario Energy Board Act*, S.O. 1998, c. 15, Sched. B;

AND IN THE MATTER OF an application by Union Gas Limited for an Order granting leave to construct natural gas pipelines in the in the Township of Dawn-Euphemia in Lambton County.

BEFORE: Cathy Spoel
Presiding Member

Paul Pastirik
Member

ORDER

LEAVE TO CONSTRUCT NATURAL GAS PIPELINES

Union Gas Limited (Union) applied on November 4, 2016 to the Ontario Energy Board (OEB) for approvals under sections 38(1), 40 (1), and 90(1) of the *Ontario Energy Board Act, 1998* (OEB Act). Collectively, these approvals would allow Union to increase capacity and deliverability of the Dawn 156 and Bentpath natural gas designated storage pools (2017 Storage Enhancement Project or the 2017 Project).

Union applied for a leave to construct the following pipelines:

- approximately 285 metres and 170 metres of nominal size 12 inch pipeline in the Dawn 156 pool; and
- approximately 230 metres of nominal size 12 inch pipeline in the Bentpath pool.

The leave to construct application is part of Union's 2017 Storage Enhancement project related applications. In addition to the leave to construct application, Union also applied to increase the operating pressure and for a report to the Ministry of Natural Resources and Forestry (MNRF) recommending the issuance of licences to drill and deepen wells in the Dawn 156 and the Bentpath pools. The pipelines that are the subject of this application are proposed to connect new wells to Union's integrated storage and transportation system. All these approvals collectively enable Union to increase storage deliverability and capacity of Union's Dawn 156 and Bentpath pools.

The OEB issued a Notice of Application on December 15, 2016. Union served and published the notice as directed. The OEB proceeded by way of a written hearing. In accordance with Procedural Order No. 1 issued on January 10, 2017, the interrogatory phase was completed on February 7, 2017. The MNRF and OEB staff filed written submissions on February 21, 2017. The record for the proceeding was closed on February 28, 2017 with Union's written reply submission.

On April 13, 2017 the OEB issued a Decision approving all the applications sought under OEB File No. EB-2016-0322 and recommending that the MNRF issue the licences requested by Union. This leave to construct order is issued in accordance with the OEB's Decision in EB-2016-0322.

THE BOARD ORDERS THAT:

Union Gas Limited is granted leave to construct approximately 285 metres and 170 metres of nominal size 12 inch pipeline in the Dawn 156 Designated Storage Area, and approximately 230 metres of nominal size 12 inch pipeline in the Bentpath Designated Storage Area, all located in the Township of Dawn-Euphemia in Lambton County, and in the location shown in Schedule 10 and Schedule 11 the Union Gas Limited's evidence, pursuant to subsection 90 (1) of the Act, subject to the Conditions of Approval set forth in Appendix A to this Order.

DATED at Toronto, April 13, 2017

ONTARIO ENERGY BOARD

Original Signed By

Kirsten Walli
Board Secretary

APPENDIX A

TO THE

EB-2016-0322

ORDER

PIPELINES LEAVE TO CONSTRUCT

CONDITIONS OF APPROVAL

APRIL 13, 2017

**Leave to Construct Conditions of
Approval Application under Section 90 of
the OEB Act Union Gas Limited
EB-2016-0322**

1. Union Gas Limited (Union) shall construct the facilities and restore the land in accordance with the Board's Decision and Order in EB-2016-0322 and these Conditions of Approval.

2. (a) Authorization for leave to construct shall terminate 12 months after the decision is issued, unless construction has commenced prior to that date.

(b) Union shall give the OEB notice in writing:
 - i. of the commencement of construction, at least ten days prior to the date construction commences;
 - ii. of the planned in-service date, at least ten days prior to the date the facilities go into service;
 - iii. of the date on which construction was completed, no later than 10 days following the completion of construction; and
 - iv. of the in-service date, no later than 10 days after the facilities go into service.

3. Union shall implement all the recommendations of the Environmental Protection Plan filed in the proceeding, and all the recommendations and directives identified by the Ontario Pipeline Coordinating Committee review.

4. Union shall advise the OEB of any proposed change to OEB-approved construction or restoration procedures. Except in an emergency, Union shall not make any such change without prior notice to and written approval of the OEB. In the event of an emergency, the OEB shall be informed immediately after the fact.

6. Both during and after construction, Union shall monitor the impacts of construction, and shall file with the OEB one paper copy and one electronic (searchable PDF) version of each of the following reports:

-
- (a) a post construction report, within three months of the in-service date, which shall:
- i. provide a certification, by a senior executive of the company, of Union's adherence to Condition 1;
 - ii. describe any impacts and outstanding concerns identified during construction;
 - iii. describe the actions taken or planned to be taken to prevent or mitigate any impacts of construction;
 - iv. include a log of all complaints received by Union, including the date/time the was received, a description of the any actions taken to address the the rationale for taking such actions;
 - v. provide a certification, by a senior executive of the company, that the company has obtained all other approvals, permits, licences, and certificates required to construct, operate and maintain the proposed project.
- identified
- complaint
complaint,
complaint,
and
- b) a final monitoring report, no later than fifteen months after the in-service date, or, where the deadline falls between December 1 and May 31, the following June 1, which shall:
- i. provide a certification, by a senior executive of the company, of Union's adherence to Condition 3;
 - ii. describe the condition of any rehabilitated land;
 - iii. describe the effectiveness of any actions taken to prevent or mitigate any identified impacts construction;
 - iv. include the results of analyses and monitoring programs and any recommendations arising therefrom; and
-

- v. include a log of all complaints received by Union, including the date/time the complaint was received, a description of the complaint, any actions taken to address the complaint, the rationale for taking such actions.